

Work Order ID 129665

129665

February-23-15 10:14:53 AM

Page 1

Item ID: D2803-2 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Bracket
 Start Date: 2/23/15 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 2/23/15 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: MLJ Date: 15-02-23 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2803	Rev B

100		0.00							
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100 FLOW WATER JET

Waterjet Memo 0.00

FLOW CNC Waterjet 1-Cut as per File d2803-2_blank

1/2" x 10" Dwg Rev: B

6061 T6 Prog Rev: B

2-Deburr if necessary

110		0.00							
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110 HAAS CNC VERTICAL MACHINING #1

HAAS 1 Memo 0.00

HAAS CNC vertical machine #1 Machine as per folio FA102

120		0.00							
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120 QC2- Inspect parts off machine FAI/FAIB

QC Memo 0.00

Quality Control

5 0 Jm 15-3-5

4 1 36
15-03-29

4 1 36
15-03-29

#PTC

DQA:

Date:

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed:

Date:

Work Order update only ☐

Work Order: <u>129665</u>	DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS			
Part No. <u>D2803-2</u>		Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
NCR No. <u>15-4865</u>		Machining ☒	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐
		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
		Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design		15.03.30	110	1	.125 ± .010 web (bottom) is .110" and overall thickness is .480" (should be .500") Both caused by stock material being thin/warped. R.C. material.	A.R. 15.03.30	SCRAP, MARGINS ARE LOW ON PART AS IS. FAILURE MODE IS DUCKLING MPL Not replaced	BG 15.03.30	15/03/31	DAS 9 9-89 15.03.31
Doc/Data										
Equip/Tooling										
Handling/Pre										
Material	X									
Operator										
Offset/Setup										
Process										
Supplier										
Training										
Transport										
Unapproved										

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☒ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge	☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130	QC8- Inspect parts - second check	0.00							
130									
QC	Memo	0.00							DAS 08 9-89
Quality Control									

140	Chemical Conversion Coat per QSI005 4.1	0.00							
140									
HandFinish	Memo	0.00							
Hand Finishing									

145	QC7-Inspect Chemical Conversion Coat	0.00							
145									
QC	Memo	0.00							DAS 38 9-89
Quality Control									

MAR 31 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Design ☐									
Doc/Data ☐									
Equip/Tooling ☐									
Handling/Pre ☐									
Material ☐									
Operator ☐									
Offset/Setup ☐									
Process ☐									
Supplier ☐									
Training ☐									
Transport ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence
		☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge
		☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other

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Page 3

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Identify as per dwg & Stock Location: <u>st 474</u>	0.00				4			
150									
Packaging	Memo	0.00							
Packaging									
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.00							
Quality Control									

MAR 31 2015

MLJ 1504-01

DS-4-1

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
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Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
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Training									
Transport									
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FAULT CATEGORY

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Picklist Print

February-23-15 10:14:51 AM

Page 1

Work Order ID: 129665

129665

Parent Item: D2803-2

D2803-2

Parent Item Name: Bracket

Start Date: 2/23/15

Required Date: 2/23/15

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP A 00.11.06New IssueEC
IPP Rev:B Blanks now cut on Waterjet 06-06-14 JLM
IPP Rev:C Removed Tumbling 08-09-10 JLM Verified By:EC IPP
Rev:D add qc3 DD 10.02.19 Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B0.500X10.00 0		Purchased	No			100	f	19.2000	1.9167	9			

M6061T6B0 500X10 000

6061-T6 Bar .500 x 10.00

**

Jm15-3-5.

Location	Loc Qty	Loc Code
MAT001	19.2	
M130527	2.2	
M130860	5	
M131392	12	

131700

131392 X5

4' 36 15-03-30

DQA: _____ Date: _____



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Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
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Doc/Data									
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Training									
Transport									
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FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence
		☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge
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DART AEROSPACE LTD		Work Order:	129665
Description: Bracket		Part Number:	D2803-2
Inspection Dwg: D2803	Rev: B	Page 1 of 1	

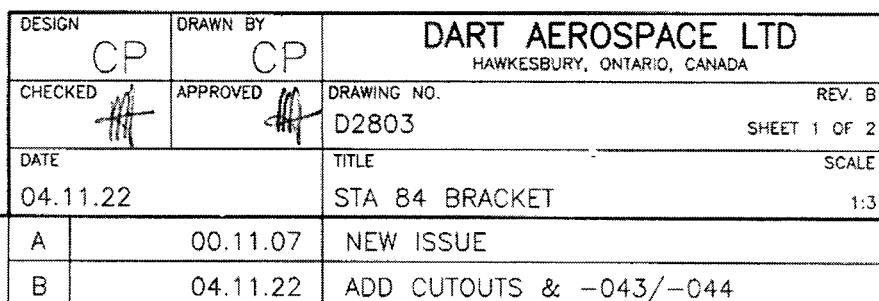
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

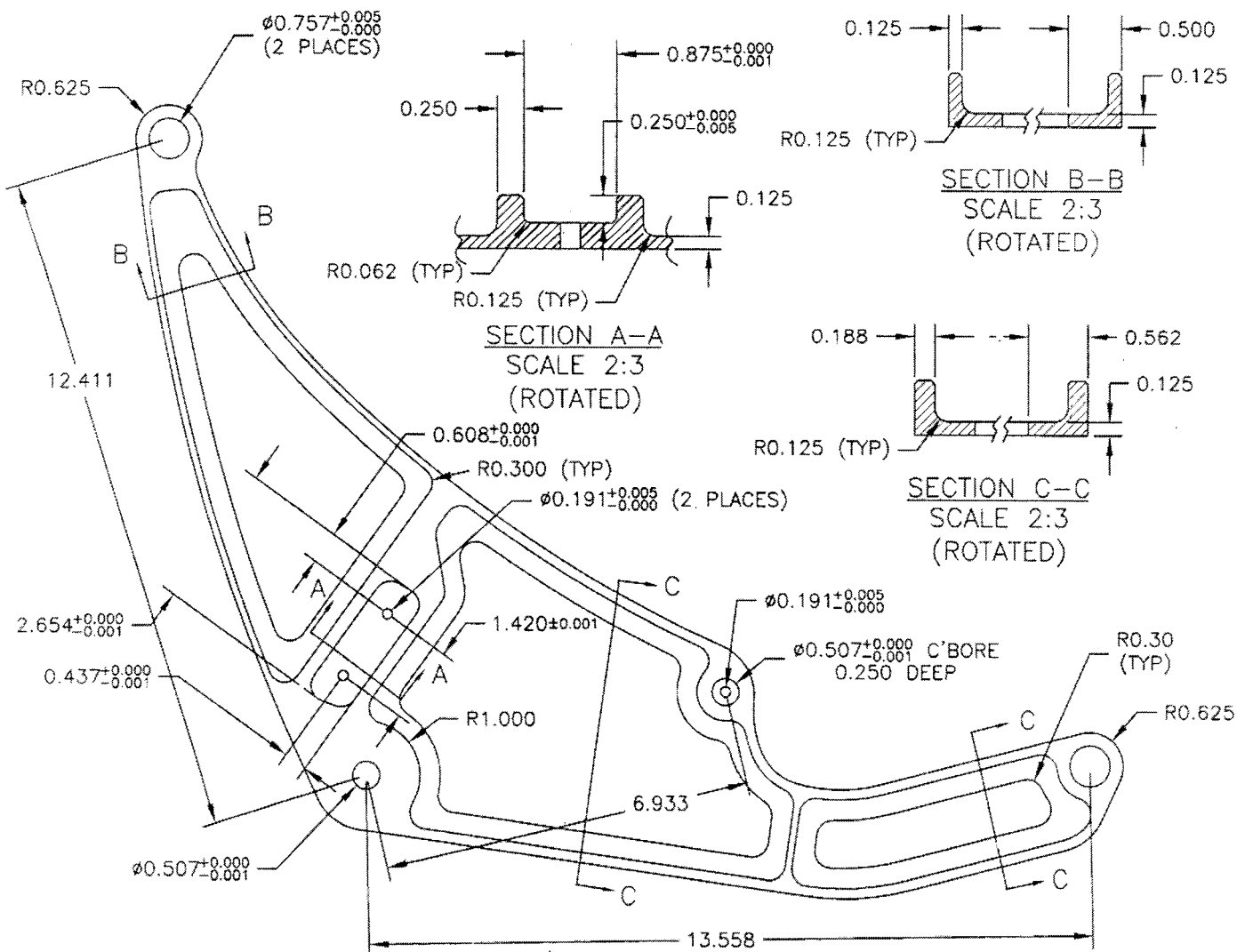
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.757	+0.005/-0.000	.758	✓		6" Vern	BC 05
1.420	+/-0.001	1.420	✓		"	"
Ø0.191	+0.005/-0.000	.191	✓		"	"
Ø0.507	+0.000/-0.001	.506	✓		g-rings	Shug
Ø0.507 x 0.250	+0.000/-0.001	.506 x .246	✓		"	Shug
12.411	+/-0.010	12.411	✓		Tape	BC 07
6.933	+/-0.010	6.933	✓		12" Vern	BC 06
0.250	+/-0.010	.250	✓			
0.875	+0.000/-0.001	.874	✓			
0.250	+0.000/-0.005	.247	✓			
0.125	+/-0.010	.124	✓			
0.125	+/-0.010	.125	✓			
0.500	+/-0.010	.500	✓			
0.125	+/-0.010	.125	✓			
0.188	+/-0.010	.189	✓			
0.562	+/-0.010	.563	✓			
0.125	+/-0.010	.125	✓			

Measured by: <u>BC</u>	Audited by: <u>AS</u> DAS	Prototype Approval:	N/A
Date: <u>15.03.29</u>	Date: <u>15/03/31</u> 08 9-89	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	05.04.25	New Issue	KJ/JLM	
B	06.12.07	13.558 dimension removed	KJ/JLM	
C	08.01.16	Tolerance revised for 0.875 dimension	KJ/EC/DD	



05.03.11

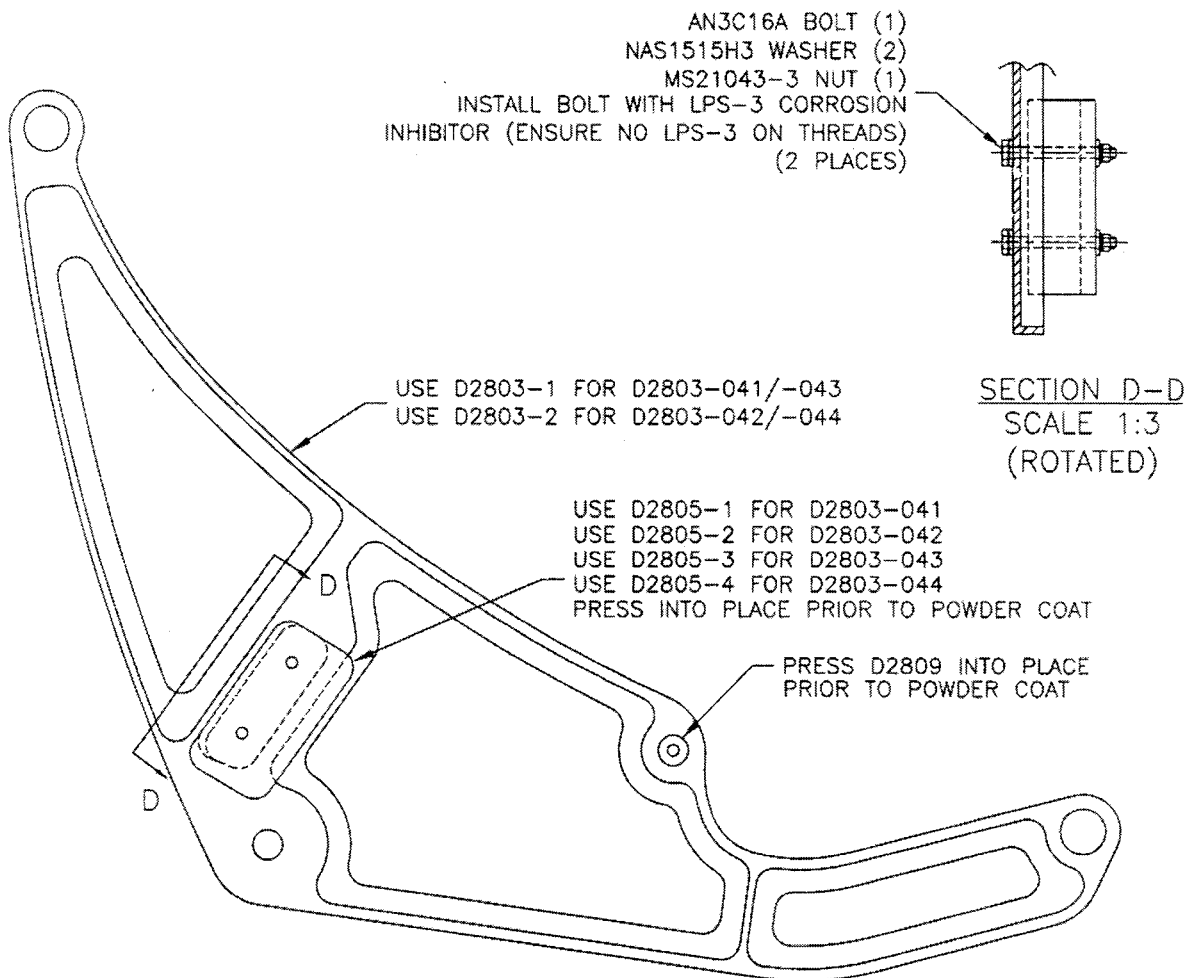


1) MACHINE PER DRAWING FILE "D2803.SLDPRT"
2) MATERIAL: 6061-T6 (QQ-A-200/8) OR (QQ-A-250/11) 0.500 THICK
3) DEBURR TO LEAVE R0.030 - 0.063 ON ALL EDGES
4) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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DESIGN CP	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 	APPROVED 	DRAWING NO. D2803	REV. 8 SHEET 2 OF 2
DATE 04.11.22		TITLE STA 84 BRACKET	SCALE 1:3



RELEASED

05-03-11

D2803-041/-043 BRACKET ASS'Y (SHOWN).
D2803-042/-044 BRACKET ASS'Y (OPPOSITE)

6) FINISH: POWDER COAT ASSEMBLY GLOSS WHITE (4.3.5.1) OR GREY SANDTEX (4.3.5.6)
OR BLACK SANDTEX (4.3.5.7) OR GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3

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